# FE309 WIRE DRAG

Diagram No. 1267-2

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

# DESCRIPTIVE REPORT

#### LOCALITY

State

Mississippi

General Locality Gulf of Mexico

Sublocality Horn Island Pass to Ship

Island Pass

19 74

CHIEF OF PARTY
CDR L.E. Pickens

LIBRARY & ARCHIVES

DATE April 20, 1989

☆U.S. GOV. PRINTING OFFICE: 1985-566-054

FE309 WIRE DRAG FORM C&GS-537

# U.S. DEPARTMENT OF COMMERCE ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION COAST AND GEODETIC SURVEY

REGISTER NO.

-H-9420WD FE-309 WD

#### HYDROGRAPHIC TITLE SHEET

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

RH-40-1-74

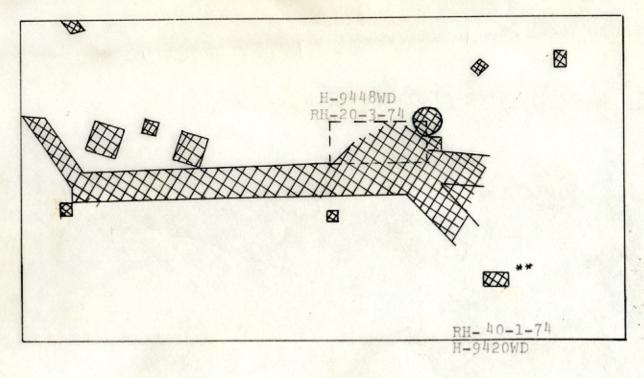
State MISSISSIPPI	
General locality GULFPORT - PASCAGOULA Gul	t of Mexico
Ocality HORN ISLAND PASS SHIP ISL	AND PASS
Scale 1:40,000 Dat	e of survey 17 APR. 1974-26 JUNE 1974
Instructions dated 12 NOVEMBER 1973 Pro	
Vessel NOAA Ships RUDE & HECK	V
Chief of party CDR. L.E. PICKENS	V
Surveyed by CDR. L.E. PICKENS & Ships	Officers
Soundings taken by echo sounder, hand lead, Note wire drag	
Graphic record scaled by N/A	V
Graphic record checked by	V - 4: 1201 0/ 4 (11)
Protracted by M/A  Verification Soundings penciled by Hydrographic Surveys Branch Effective depths in Soundings in fathoms feet at MLW XXXXV	AMC  BASED ON PREDICTED TIDES
REMARKS:	
AWOIS/SURFV 4/1	19/89 55/
XWW 7/13/90	USCOMM-DC 37009-P66

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89 20 29 55

PROGRESS SKETCH
40-1-74; 40-1-74-A; 20-3-74
WIRE DRAG: SAFETY FAIRWAYS
GULF OF MEXICO
NOAA SHIPS: RUDE & HECK
L.E. PICKENS, CHIEF OF PARTY
APRIL - JUNE 1974
SCALE 1:456,394; C&GS CHART 1115

0 -

AREA COMPLETED APRIL 17, 1974JUNE 24, 1974

\* \* \_\_\_40-1-74-A, (CHARTED OBSTRUCTION)

ITEMS COMPLETED

#### DESCRIPTIVE LETTER

TO ACCOMPANY

FE-309 WD

WIRE DRAG FIELD NUMBER RH-40-1-74, H-9420WD-

PROJECT OPR-479-RU/HE-74

PRE-SURVEY ITEMS AND HANGS

GULFPORT - PASCAGOULA, MISSISSIPPI

1974

CDR. L.E. PICKENS

#### NOAA SHIPS RUDE & HECK

- A. AUTHORITY
  This project was authorized under Project Instructions OPR-479-RU/HE-74,
  Safety Fairways, Gulf of Mexico, dated November 12, 1973 and Changes
  #1 & #2 dated Dec. 11, 1973, Change #3 dated Jan. 21, 1974 and Memo:
  C3x4 dated April 22, 1974.
- B. CHARACTER AND LIMITS OF THE WORK
  The purpose of this project was to clear the Approach Safety Fairways leading to Gulfport and Pascagoula. This report covers all the hangs encountered while working on 40-1-74. Also included in this report are all the pre-survey items which were investigated. The locality, covered by C&GS charts 1267, 1115, 874-SC & 876-SC is as follows: Sheet layout is from Latitude 30°02'N to 30°18'N and Longitude 88°26'W to 89°00'W. The majority of the survey was conducted on a scale of 1:40,000 using Raydist DR-S Range-Range control. There was one section, the Safety Fairway leading into Pascagoula, where a 1:20,000 scale was used (Sheet 20-3-74, H-9448-WD). A separate descriptive letter will be submitted for this sheet.
- C. CONTROL AND SHORELINE
  Raydist DR-S Range-Range control was used, operating on a frequency of
  3300.4000 KHz, giving a lane width of 45.39904 meters. Two Raydist shore
  stations, PASS, and CITY were utilized for control. PASS, located in
  Pascagoula, Mississippi served as the Red Station. CITY, located near the
  City Pier in Gulfport, Mississippi served as the Green Station. There
  was no shoreline on the sheet. Upon completion of the survey the stations
  were dismantled; both stations are recoverable. For further information
  on the stations see Attachment VII. A listing of all signals used is
  given in Attachment I.
- D. DATE OF SURVEY Operations for OPR-479 Sheet RU/HE-40-1-74 commenced on April 17, 1974 and terminated on June 26, 1974.

E. TIDAL REDUCERS Preliminary reduction of each days data was done using predicted tides. Actual tidal data will be furnished by the Rockville Office for the standard gauge at Dauphine Island, Alabama with correctors for Ship Island Pass and Horn Island Pass. Servicing and levels to this gauge were not required.

F. JUNCTIONS Not applicable - See section 5. of the Modified Evaluation Report

G. SPLITS - See section 4. of the Modified Evaluation Report. No splits existed on any hangs or Pre-Survey Items which we investigated.

- H. GROUNDINGS AND HANGS See section 7.a. of the Modified Evaluation Report.
  - Metal Pipe. 8" in diameter; least depth: 20 feet in. 25 feet of of water. The pipe, was located at Latitude 30011,58 N and Longitude 88°59 27 W. The drags that pertain to this obstruction were the following: B Day Strip 2 and C Day Strip 1. A clearing strip was run on C Day Strip 2 in which the pipe was cleared to 14 feet. We attempted three clearing strips until this drag finally passed over the obstruction. We suspect that other pipes were in the area standing higher than this one pipe that divers investigated. The pipe was firmly implanted in the bottom. See 7.a.12)
  - Piece of Iron. 20' long, least depth: 26 feet lying in 30 feet of water. This obstruction was located at Latitude  $30^{\circ}07$  15 N and Longitude  $88^{\circ}56$  W. The drags that pertain to this item were H Day Strip 1 and L Day Strip 3. A clearing strip was run on L Day Strip 2 which had an effective depth of 2%'. This obstruction is not considered a hazard to navigation. See 7, a. 13)
  - 3. Sunken Dredge. Marked by Dredge Wreck Lighted Buoy "WR2" (Light List 4647.50). Least depth: 8.5 feet in 15 feet of water. The length of this dredge was approximately 80 feet. The location was Latitude 30°17.0°N and Longitude 88°55.0°W. drags that were envolved with this obstruction were Q Day Strip 1, O Day Strip 2, R Day Strip 1 & R Day Strip 2. The clearing strip was run on R Day Strip 3 in which an effective depth of 5.0 feet was obtained. See 7.a.11)
  - Sunken Barge. The length of this barge was approximately 100 feet. Least depth: 34 feet. We were attempting to hang Item # 57, a charted fish haven, when we encountered this obstruction obstruction. The barge is located at Latitude 30°09. N and 88°28' W. The drags envolved in this item were W Day Strip 3, X Day Strip 1, GA Day Strip 1 and the clearing strip was run on X Day Strip 2. We cleared this obstruction to 30. feet. See 7.a, 23)
  - 5. Metal Debris. On several days we found pieces of metal "junk" scattered around in about the same general area. The 44 feet of water. We encountered these objects on AA Day Strip 1, 7, a. 20)
    FA Day Strip 2 and JA Day Strip 1 & 2 This ... FA Day Strip 2 and JA Day Strip 1 & 2. This area was cleared on BA Day Strip 2 to 41 feets Not considered a hazard to navigation.

    See 7,a.21)

    See 7,a.21

See 7. a. 22)

The following were not hangs but were additional items we investigated during this project.

- 6. Charted Visible Wreck (874-SC, Edition 9, November 1973).

  Located near Grande Batture Island Shoal Lighted Buoy "GB"

  (Light List Number 4639) in Mississippi Sound. We failed to locate any wreck. On DA Day Strip 1 we cleared an area of 1 NM diameter starting from the North and running South until we hung the Buoy "GB". In addition we ran a drag in an East to West direction until we hung "GB", this was DA Day Strip 2. On this drag we did hang just south of the buoy "GB". Divers reported this as a mud knoll. Discrepancy Location of buoy "GB" was Latitude 30°14.93"N and 88°26.20"W. SEE ATTACHMENT V. See 7. a. 24
- 7. Reported Obstruction on chart 1267, Latitude 29°59.32"N and Longitude 88°23.70"W. We covered a 1 NM diameter around this charted obstruction but failed to hang the obstruction. See 7.0.8)
- 8. Sunken Barge located on chart 874-SC (Edition 9, November 1973)
  near Dauphin Island Lighted Buoy "46" (Light List No. 4638) in
  Mississippi Sound. Charting division in Rockville, Maryland
  reported this item to be a barge, 220 ft. X 30 ft. with
  a reported least depth of 12 feet. On KA Day Strip 1 & 2
  we covered an area around the charted wreck. On the first
  drag we hung on some "junk" North East of the charted
  position. The second drag failed to locate the barge. For
  information regarding our control for this survey see
  I. GENERAL NOTES under KA Day. See 7. a. 9

#### I. GENERAL NOTES

While working out of Gulfport, morning and evening calibrations were generally made by circle calibrating at Gulfport Channel Entrance Directional Light (Quad. 300883, Station 1187). SEE ATTACHMENT I. Also see Light List CG-160, 1974, Number 1921 which refers to this as Entrance Leading Light. This Directional Light was located on the north side of Ship Island while our working area was on the south side of the island.

While working out of Pascagoula, calibrations were generally made by running Horn Island Pass Entrance Range (Quad. 3008%, Station 1143-44) and turning a left angle to signal "Platform" (Photo Party 61, June 6, 1970; SEE ATTACHMENT I C). We checked the effect of the signals passing over land by circling the Horn Island Rear Range marker (Quad. 3008%, Station 1144), SEE ATTACHMENT I. No measurable difference was found between the signals that passed over land and the signals that passed over the water.

In addition to morning and evening calibrations, lane counts were taken during inclement weather on navigation buoys. SEE ATTACHMENT IV.

The following occurances should be noted when verifying this survey:

A Day Strip 1 (April 16, 1974)
The Rude lost 2 lanes on their green reading (R2) between the morning and evening calibrations. There was a thunder squall during the morning which probably caused this lane loss. We still had sufficient overlap to cover Item # 53. Just to make sure that the area was covered, an

additional drag was run over the area of Item # 53 on D Day Strip 1.

D Day (April 22, 1974)

Strip 1: During this drag the Rude's gyro compass malfunctioned. For the remainder of the drag a corrector was applied to the bearings taken from the Rude to November and Hotel. We compared our heading by gyro compass to our magnetic compass heading and determined the amount they differed. Then we applied this difference to our bearings and recorded our corrected bearings in the volume.

Q & R Day (May 9th & 10th, 1974)

We were working an Item near Dredge Wreck Lighted Buoy "WR2" located in the Mississippi Sound. It was more economical time wise not to run all the way out to the Directional Light in order to calibrate. Therefore, we recorded a lane count on Gulfport Ship Channel Buoy "54" at the conclusion of the working day on May 8, 1974, SEE ATTACHMENT V. Then on Q & R Day we picked up this lane count in the morning and evening and compared it to the one recorded on May 8th. By doing this we could see if any substantial lane loss occured during these two working days. Our Raydist held constant readings throughout these two days. Also, the location of buoy "WR2" was such as to make our intersecting Raydist lines from the two shore stations questionable. Because of this we took visual fixes as well as Raydist fixes which were both recorded in our volumes. We used chart 876-SC (Edition 8, November 1972) for locating signals and for plotting our visual fixes. SEE ATTACHMENT I.

DA Day (June 7, 1974)

This day we were working in the Mississippi Sound around Grande Batture Island Shoal Lighted Buoy "GB" charted on 874-SC (Edition 9, November 1973). For this item we located the buoy "GB" visually by means of a left and right angle with a check angle. SEE ATTACHMENT V. All readings are recorded in our volume. After locating the buoy we referenced all our work to the buoy "GB". Our Raydist readings seemed to give us good fixes in this area but as a check we also recorded a visual angle. SEE ATTACHMENT I B.

KA Day (June 24, 1974)

During this day we were investigating a charted wreck with a reported least depth of 12 feet. It was located near Dauphin Island Lighted Buoy "46" in the Mississippi Sound (Chart 874-SC, Edition 9, November 1973). The area of the wreck was not located on our boatsheet so we plotted the ships positions by taking radar distance and a gyro bearing to buoy "46". All work was plotted on chart 874-SC. We also located buoy "46" visually and referenced our work to the buoy. SEE ATTACHMENT I B and ATTACHMENT V.

#### J. CURRENTS

In general we found that the currents were rotary. In the morning there was a South West current and toward the end of the day we noticed a current toward the North East. It was found to be advantageous to conduct our own "current survey" prior to planning a strip. This was accomplished by setting a tester to the approximate depth of the drag, plotting its position as it entered and again as it was retrieved from the water and noting the length of time envolved. In this manner both velocity and direction were determined.

K. DISCREPANCIES AND COMPARISONS WITH RECENT SURVEYS AND CHARTS See sections 6.57. In general, charted depths from the most recent charts were found to be reliable. There were some areas though where discrepancies existed. The ships ran reconnaissance hydro immediately prior to wire dragging. We used this recon hydro to plan our drag depth. Our tests, which usually were TOB (Tester on Bottom) tests, indicated that our ground wire was close to the bottom. We found some obstructions not listed on charts. SEE ATTACHMENT II.

#### L. PERSONNEL AND EQUIPTMENT

During this survey the Rude & Heck acted as Guide Vessel and End Vessel respectively. Both vessels were equipped with Raytheon DE-723 Fathometers. Normally the launches alternated as drag tenders except on calm days when skiffs were utilized. Bearings to end buoys and to opposite vessels were made on the Sperry Gyro Repeaters. Standard wire drag equiptment was used throughout the survey.

Officers aboard during work on this survey included: CDR. L.E. PICKENS, LCDR. W.M. NOBLE, ENS. K.F. VAN TRAIN, ENS. D.J. SIGRIST, ENS. G.M. ALBERTSON and ENS. C.E. MERICAS.

#### M. MISCELLANEOUS

During the inport period at AMC last year a number of new personnel came aboard. We found that because of the inexperience of our testers in the launch a new testing procedure had to be adopted. Occasionally we had to request the launch personnel to raise or lower the tester to a depth different from that of the ground wire. When this occured we had the testers read the testing pole as if it were always set at the ground wires depth. They did not apply any correction to their test. When the launch transmitted the test result to the recorder on the Rude he applied the necessary correction and recorded it on his tester sheet. At the end of the day the launch tester sheets were all checked and changed to correspond with the Rude's tester sheets.

#### N. SUMMARY

The following items were investigated while working on this project and our results are as follows:

#### ITEM # 53

This was a sunken wreck charted in Latitude 30°05.6"N and Longitude 88°56.7"W. It was reported in 1959 and described as a barge with 16 feet of water reported over it. The item was investigated to a 1 NM diameter with no wreck being located. The area was cleared to a 33' minimum effective depth of 29.5' and a maximum effective depth of 31.5'. Our fathometer showed an approximate depth of 31 feet in the area around the charted position of the obstruction. The clearing strip was run on A Day Strip 1. We also covered this area again on D Day Strip 1. (predicted tides) See 7.a.1)

This was a reported wreck charted at Latitude 30°10'N and Longitude 88°54'W - position approximate. The wreck was charted as lying in 29' of water. The area was investigated to a 1 NM radius. We failed to locate any wreck or hazard to navigation. The area was cleared from a minimum effective depth of 26' to a maximum effective depth of 32'. Drags involved with this item were K Day Strip 1 and L Day Strip 4. (predicted tides) - See 7.a. 2)

TTEM # 55

Reported as an obstruction, fish haven, located at Latitude 30°10.5"N and Longitude 88°50.6"W. We cleared this area on N Day Strip 2 to a minimum effective depth of 31.5' and a maximum effective depth of 36'. We covered a 1 NM diameter area. No obstruction was located. Drags that covered this item were N Day Strip 2.500 7.4.3

This was a sunken wreck charted in Latitude 30°09.25"N and Longitude 88°47.5"W - position approximate. We cleared this area to a 1 NM radius and achieved a minimum effective depth of 39.51 and a maximum effective depth of 42.0". Again no wreck was found. The drags that pertain to this item were N Day Strip 2 and P Day Strip 1. See 7.0.4) ITEM # 57

Reported as a sunken schooner in 1925. Charted in Latitude 30°09.7"N and Longitude 88°29.3"W. This item was hung on the following strips:

T Day Strip 1 and X Day Strip 3. Two clearing strips were run on this item. One on T Day Strip 2 where we obtained an effective depth of 39.1. And one on HA Day Strip where we had an effective clearing depth of 40.0'. Our hydro over the area showed a general depth of 44 . Sec. 7.4.5 ITEM 208 39

This was reported as an obstruction, fish haven, located at Latitude 30°04.9"N and Longitude 88°36.92"W. We cleared an area to 1 NM diameter around the charted obstruction. We cleared this area to a minimum effective depth of 5% and a maximum effective depth of 5%. No obstruction was found in this area. The drag run on this item was U Day Strip 1. See 7.2.6

O. RECOMMENDATIONS—See section 7.a. of the Modified Evaluation Report.
Recommend that ITEM # 53 be removed from chart 1267. This item is considered complete.

Recommend that ITEM # 54 be removed from the chart, 1267. This item is considered complete.

Recommend that ITEM # 55 be removed from chart 1267. This item is considered complete.

Recommend that ITEM # 56 be removed from chart 1267. This item is considered complete.

Recommend that ITEM # 57 be charted as cleared to 40.0'. This item is considered complete.

Recommend that ITEM 20B be removed from chart 1267. This item is considered complete.

Recommend that the metal pipe found on B Day Strip 2, located near Gulfport Ship Channel Buoy "27" be charted on 1267. The pipe has a Least depth of 14' and since deep draft vessels use this channel it should be considered a hazard and charted as such. This item is considered complete.

Recommend that the barge located near ITEM # 57 be charted on chart 1267. This had a least depth of 3% and since it is on the edge of the Safety Fairway it could be a hazard to navigation. This item is considered complete.

Recommend that the wreck charted by Buoy "GB" be removed from Charts 1267 & 874-SC (Edition 9, November 1973). This item is considered complete.

Recommend that the off shore obstruction reported in 1973, Latitude 29°59.32"N and Longitude 88°23.70"W, be removed from chart 1267. This item considered complete. Recommend that the barge with a charted least depth of 12' located near buoy "46" in the Mississippi Sound be removed from Chart 874-SC (Edition 9, November 1973). This item is considered complete.

#### APPROVAL SHEET

All records of this survey prior to smooth plotting are hereby approved. The field work was personally supervised by the undersigned and the boatsheet and records were inspected daily. The survey is considered complete and adequate for charting.

CDR. L.E. Pickens Commanding Officer NOAA Ships RUDE & HECK

#### LIST OF ATTACHMENTS

- A) RAYDIST CONTROL STATIONS I.
  - B) VISUAL CONTROL SIGNALS
  - C) VISUAL CONTROL SIGNALS SOURSE
- LIST OF GROUNDINGS & HANGS II.
- III. 

  ★ A) DIALY RAYDIST CORRECTORS

  ★ B) ELECTRONIC CALIBRATION INFORMATION
- IV. STATISTICS
- V. AIDS TO NAVIGATION
- VI. ★ PROJECT INSTRUCTIONS
  - \* A) CHANGE # 1
  - CHANGE # 2 **★** B)
  - \* C) CHANGE # 3
  - ⋆ D) MEMO: C3x4
- VII. \* RAYDIST STATION DESCRIPTIONS
- VIII. \*A) TIDES, PREDICTED
  - \*B) REPORT ON TIDE STATION
- PARAMETERS IX.
  - **★**A) BOAT SHEET, REQUEST FOR
  - \* B) ELECTRONIC CONTROL PARAMETERS

\* = Data Removed from the Descriptive Report and filed with the field records.

#### ATTACHMENT I

#### A. RAYDIST CONTROL STATIONS

A. RAYDIST CONTROL	STATIONS									
STATION	LATITUDE	LONGITUDE	REMARKS							
PASS, 1974	30°20'39.844"	88°33'38.961"/	RED STATION field position							
CITY,/974	30°21'51.529"	89°05'25.906"	GREEN STATION field position							
B. CONTROL SIGNALS	- USED FOR CALIBRATION	ON, GULFPORT								
SIGNAL	LATITUDE	LONGITUDE	REMARKS							
GULFPORT CHANNEL ENTRANCE DIRECTIONAL LIGHT, Quad. 300883 Station 1187)			CIRCLE CALIBRATION							
SIGNALS USED TO CALI	BRATE, PASCAGOULA									
SIGNAL	LATITUDE	LONGITUDE	REMARKS							
HORN ISLAND PASS ENTRANCE RANGE, REAR LIGHT; Quad. 300883 Station 1144)		88 <sup>0</sup> 30'03.547" ✓	CIRCLE CALIBRATION							
HORN ISLAND PASS ENTRANCE RANGE, REAR LIGHT (Quad. 300883 Station 1144) HORN ISLAND PASS ENTRANCE RANGE, ERON	30°13'04.545"	88 <sup>°</sup> 30'03.547"/	REAR RANGE							
LIGHT (Quad. 300883 Station 1143)	30°12'49.042"	88°30'19.132"	FRONT RANGE							
PLATFORM (Photo Part 61, June 6, 1970; Se ATTACHMENT I C)	ee Cannot be werfied - 30°13'29.880"	no published data 88 <sup>0</sup> 32'06.660"	LEFT ANGLE							
VISUAL SIGNALS USED FOR WORK NEAR BUOY "WR2", MISSISSIPPI SOUND										
SIGNAL	LATITUDE	LONGITUDE	REMARKS							
GULFPORT SPIRE GULFPORT WEST PIER WATER TANK USN, 1943	*30°-22′ <del>-05</del> "	89°05'-30"	_ position scaled off-of chart. LEFT OBJECT							
(Quad. 300892 Sta. 1097) GULFPORT EDGEWATER WATER TANK! Quad.	30 <sup>0</sup> 21'29.969"✓	88 <sup>0</sup> 05'43.208''/	LEFT OBJECT							
300883 Sta. 1186)	30°23'30.917"/	88°59'21.052"	CENTER OBJECT							

<sup>\*</sup> Positions are approximate scaled off chart 876-SC (Edition 8, Nov. 1972)

#### ATTACHMENT I

B. CONTROL SIGNALS (Cont.)

VISUAL SIGNALS USED FOR WORK NEAR BUOY "46" (Cont.)

SIGNAL	LATITUDE	LONGITUDE	REMARKS
BILOXI LIGHTHOUSE, 18	55		
(fluad. 300883 Sta. 1136)	30°23 <b>'</b> 39. <b>27</b> "	88 <sup>0</sup> 54'04.2 <b>3</b> "	RIGHT OBJECT
VISUAL SIGNALS USED	TO LOCATE BUOY "GB",	MISSISSIPPI SOUND	
SIGNAL	LATITUDE	LONGITUDE	REMARKS
HORN ISLAND PASS ENTRANCE RANGE, REAR			
Station 1144)	30°13'04.545"	88 <sup>0</sup> 30'03.547"✓	LEFT OBJECT
RANGE B, REAR LIGHT,	1970 (Rebuilt in 1971)	- This position is the	LEFT OBJECT 1970 position)  CENTER OBJECT position scaled off of chart. RIGHT OBJECT
June 6, 1970)	30°16'14.03"	88°29!5\$.11"	CENTER OBJECT
WEST OF TWO TANKS,  -BAYOU CASOTTE Passagona	*30°21'-54"	88°33'-17"	position scaled off of charl. RIGHT OBJECT
PASCAGOULA PORT O	<del>-</del>		
MOTHORITING BILDIN			
300883 Sta. 1161)	30°21'25.77†'	88 <sup>0</sup> 33'59.746''	RIGHT CHECK ANGLE
BAYOU CASOTTE, H.K. PORTER CO. TANK, 1958	30 <sup>0</sup> 19'54.816''	88 <sup>0</sup> 30'08.598"	RIGHT CHECK ANGLE
(Ouad. 300883 Sta. 1	.114)		
VISUAL SIGNALS SIGNA	LS USED FOR WORK NEAR	BUOY "GB", MISSIS	SIPPI SOUND
SIGNAL	LATITUDE	LONGITUDE	REMARKS
HORN ISLAND PASS ENTRANCE RANGE, REAR LIGHT, Ouad 300883	t		
Station 1144)	30°13'04.545"	88°30'03.547"	LEFT OBJECT
PASCAGOULA CHANNEL RANGE B, REAR LIGHT	1970 (Rebuilt in 1971	- This position is th	. 1970 Position)
(Photo Party 61, June 6, 1970)	30°16'14.03"	88°29'52.11"	CENTER OBJECT
VISUAL SIGNALS USED	TO LOCATE BUOY "46", 1	MISSISSIPPI SOUND	
SIGNAL	LATITUDE	LONGITUDE	REMARKS
HORN ISLAND PASS ENTRANCE, RANGE, REAR LIGHT! Quad. 300883	000000000000000000000000000000000000000	222222	
Sta. 1144)	30°13'04.545"	88 30 03.547"	LEFT OBJECT

<sup>\*</sup> Positions are approximate scaled off chart 874-SC (Edition 9, Nov. 1973)

#### ATTACHMENT I

B. CONTROL SIGNALS (Cont.)

VISUAL SIGNALS USED TO LOCATE BUOY "46" (Cont.)

SIGNAL	LATITUDE	LONGITUDE	REMARKS
(Photo Party 61  June 6, 1970) WEST OF TWO TAN  BAYOU CASOTTE	30°16'14.03" iks, 32.8" *30°20'-55"	88 <sup>0</sup> 29'52.11"	LEFT CHECK ANGLE  position scaled off of chart  CENTER OBJECT
ISLE AUX HERBES BEACON, (Quad. 3 Station 1103)	300882 30 <sup>0</sup> 18'08.17 <del>'</del> '	88 <sup>0</sup> 16'00.54	RIGHT OBJECT

<sup>\*</sup> Positions are approximate scaled off chart 874-SC (Edition 9, 1973)

STRIKE OUT TWO

3

I recommend that the following objects which charted on (deleted from) the charts indicated. award to determine their value

The positions given have been checked after listing by

1. 1. INCIT. はいい TINE. CHARTING STATE ICHEMPI (Fascoroula Charmel Emge THE PROPERTY OF THE PROPERTY O Conta Cimpol renge D Front ronge light for Pascacear Light, (Norm Inland Pass Corn Island Pass Charmel tage Light) ONTO STATE STATE targe light CAR LANGE RESE DESCRIPTION Channel Front Lear NAME 30 16 30 12 22 82 20 13 William J. WILLIAM S 139 Tr.03 15.90 15.90 D. M. MATERS 132 Nottern POSITION 88 29 88 88 3 8 3 LONGITUDE + 03. St. 95 122 14 X 15.78 **1393** A. P. METERS **1527** 1927 11 · A · 1927 1927 IJ.A. DATUM Cuts Cute 1970 Tron liet Cuts LOCATION AND SURVEY Doom. Theod. Theod. SOME IN 07/0::/70 x x 07/04/70x x07/10 LOCATION DATE Q HARDOR CHARY Y 12 1,14,1 116,1 APPECTED Patry CHARTS

considered for the charts of the area and not by individual field survey sheets. \* TABULATE SECONDS AND METERS landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Information under each column heading should be given. Positions of charted The data should be

5.

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considered for the charts of the area and not by individual field surve a TAPULATE SECONIS AND METERS landmarks and reniteating side to navigation, if redetermined, shall be reported on this forms. This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Se 7-18 to 22 inclusive, and Fig. 79. Positions of charted The data should be

ATTACHMENT II

#### LIST OF GROUNDINGS AND HANGS

			11.01	OF GROONDIN	GD AND HANG	10		
See .	Section	17.a.	of the	Modifi	ied Ev	aluation	Report	<del>/</del>
POSITION				Grounded	Cleared	Cleared	1	
No. & DAY	Buoy			Effective	by Day &	Effective	Charted	
LETTER	No.	Latitude	Longitude	Depth	Strip No.	Depth	Depth	Remarks
B <b>-</b> 2	2 <b>-</b> 3	30 <sup>0</sup> 11 <b>.</b> 58"	88 <sup>o</sup> 59.37"		C-2	14'	251	Metal pipe, least
		-	0				-	depth 20'
C-1	N-1	30 <sup>0</sup> 11.58"	88°59.37"		C-2	14'	· 25 <b>'</b>	Same item as above, B2
H-1	4-5	30 <sup>0</sup> 07.18"	88 <sup>0</sup> 56.70"	***	L-2	221	29 <b>'</b>	Piece of iron, least
		•	•				-	depth 26'.
L-3	4-5	30°07.18"	88 <mark>0</mark> 56.70"		L-2	221	29 <b>'</b>	Same item as above, Hl
Q <b>-</b> 1	4-5	30 <sup>0</sup> 17.70"	88°55.90"		R <b>-3</b>	5.0¹	15'	Sunken dredge, least
	_	0	•					depth 8.5'
<b>ର-</b> 2	5 <b>-</b> 6	30 17.70"	88 <mark>°</mark> 55.90"		R <b>-</b> 3	5.0'	15 <b>'</b>	Same as above, Q-1
R-1	2-3	30°17.70"	88°55.90"		R <b>-</b> 3	5.0'	15 <b>'</b>	Same as above, Q-1
R <b>-</b> 2	2-3	30°17.70"	88055.90" 88029.15"		R <b>-</b> 3	5.01	15'	Same as above, Q-1
T-1	6-7	30009.35"	88 29.15"	43.5'	HA-I	40.0'	45 <b>'</b>	Item # 57, Schooner
W <b>-</b> 3	7-8	30 <sup>0</sup> 09.22"	88°28.48"		X-2	30.5 <b>'</b>	43 <b>'</b>	Barge, least depth 34'
X-1	2-3	30009.22"	88°28.48"		X-2	30.5'	43'	Same as above, W-3
X-3	3-4	30°09.36"	88°29.17"		T-2	40.0'	451	Hung Item # 57 again
Z-1	2-3	30 <sup>0</sup> 07.69"	88043.42"		U-2	47.0'	55 <b>'</b>	Piece of metal "junk",
		0	0					3-4 feet off bottom
AA-l	10-11	30 <sup>0</sup> 08.60"	88 <sup>0</sup> 34.41"				461	Unknown, suspect more
		0						debris ás in Z-1
FA-2	8-9	3008.89"	88 <sup>0</sup> 33.76"		BA-2	41.0'	43'	Metal debris, least
	_	0	0					depth 40'
GA-1	5 <b>-</b> 6	30 09.22"	88 <sup>0</sup> 28.48"		X-2	30 <b>.</b> 5'	431.	Hung barge from W Day
	_	0	0					Strip 3
KA-2	6 <b>-</b> F	30 <sup>0</sup> 15.46"	88 <sup>0</sup> 20.55"				18'	Metal wires, 2' off
								bottom

#### ATTACHMENT IV

#### STATISTICS

DATE	DAY <sub>Yeor</sub> LETTER	STRIP NUMBER	VOLUME NUMBER	NUMBER OF POSITIONS	L.N.M.	S.N.M.
178 April 18 April 19 April 19 April 19 April 19 April 19 April 23 April 23 April 24 April 25 April 25 April 26 April 27 April 28 April 29 April 20 April 21 April 22 April 23 April 24 April 25 April 26 April 27 April 28 April 29 April 20	$V_{A}$ $V_{A$	1121231231231212112341123123121212311212312312312312312312312	I H H H H H H H H H H H H H H H H H H H	1-8 1-21 1-3 1-3 1-13 1-6-12 1-13 1-14 1-12 13-13 1-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14 13-14	1200001211332-120612220025-222201111-1033922 1200001211332-120612220025-222201111-1033922	8 H 7 3 H 103 6 7 R 10 9 5 5 H 7 8 9 H 7 3 H 103 6 7 R 10 9 5 5 H 7 8 9 H 7 3 H 103 6 7 R 10 9 5 5 H 7 8 9 H 7 3 H 103 6 7 R 10 9 5 5 H 7 8 9 H 7 3 H 103 6 7 R 10 9 5 5 H 10 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
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### STATISTICS (Cont.)

DATE	DAY LETTER	STRIP NUMBER	VOLUME NUMBER	NUMBER OF POSITIONS	L.N.M.	S.N.M.
28 May 28 May 28 May 29 May 30 May 30 May 30 May 30 June 4 June 4 June 7 June 11 June 11 June 12 June 12 June 13 June 13 June 13 June 14 June 15 June 16 June 17 June 19 June	74=148 X74=148 X74=148 X74=148 Y1=150 Z1 74=150 Z1 74=150 Z1 74=150 Z1	1231123411212121212121212121212	V VI VI VI VI VII VII VII VII VIII VII	1-10 11-19 20-24 1-52 1-2 3-16 17-21 22-32 1-14 1-26 VII 27-46 1-38 1-10 11-34 15-18 1-10 11-34 15-18 1-6 7-13 14-27 1-8 1-9 10-15	1.05 1.45 1.85 1.35 1.46 1.20 1.40 1.20 1.40 1.86 1.86 1.86 1.86 1.86 1.86 1.86 1.86	0.79 1.21 9 0.45 12.20 12.20 12.20 13.46 12.20 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 13.46 1

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#### ATTACHMENT V

AIDS TO NAVIGATION

	AIDS TO NAV	VIGATION	100 100	
GULFPORT SHIP CHA	NNEL See see	fion 7.b. of the Evaluation Report.	Modition	ed
BUOY	LATITUDE	LONGITUDE	RED	GREEN
"1" "3" "4" "5" "25" "26" "27" "28" "6"	30 07.10" 30 08.54" 30 08.65" 30 09.82" 30 11.18" 30 11.72" 30 11.72" 30 11.68" 30 09.93" 30 16.64"	88°55.87" 88°57.05" 88°57.05" 88°56.98" 88°58.20" 88°59.36" 88°59.32" 88°59.32" 88°59.24" 88°59.24" 88°58.14" 89°01.21"	960.20 963.70 957.80 972.24 986.79 981.86 977.62 974.40 968.84 986.60	688.80 618.20 615.10 551.75 480.48 482.59 465.54 469.00 549.65 259.54
MISSISSIPPI SOUND	, GULFPORT			1
BUOY	LATITUDE	LONGITUDE	RED	GREEN
"WR2" * "S1" "BF" **	30°17.86" 30°17.00" 30°17.23"	88°56.10" 88°53.23" 88°44.99"	797.22 707.11 422.12	370.45 474.10 746.22
MISSISSIPPI SOUND	, PASCAGOULA			
BUOY	LATITUDE	LONGITUDE	RED	GREEN
"5" "3" "GB" *	30°16.73" 30°15.08" 30°14.93" 30°15.30"	88°38,42" 88°36.84" 88°26.20" 88°21.00"	230.11 252.11	977.67 1047.33 
PASCAGOULA SHIP C	HANNEL			
BUOY	LATITUDE	LONGITUDE	RED	GREEN
"HIP" "1" "2" "3" "4"	30°10.60" 30°11.35" 30°11.32" 30°11.76" 30°11.68"	88°32.56" 88°31.85" 88°31.75" 88°31.45" 88°31.36"	411.23 384.11 385.44 370.00 373.66	1248.85 1261.33 1264.76 1268.80 1272.48

<sup>\*</sup> For the location of these buoys by means of visual control see next page.

NOTE: The Latitude and Longitude of all the objects we used to calibrate with can be found in ATTACHMENT I B.

<sup>\*\*</sup> Buoy "BF" was removed as of May 15, 1974 by the Coast Guard.

## LOCATION OF BUOY "WR2"

SIGNAL	ANGLE	REMARKS
GULFPORT SPIRE	35 <sup>0</sup> 24 <b>'</b>	LEFT OBJECT
GULFPORT EDGEWATER WATER TANK	43 <sup>0</sup> 22 <b>'</b>	CENTER OBJECT
BILOXI LIGHTHOUSE	15 22	RIGHT OBJECT
LOCATION OF BUOY "GB"		•
TIGNAL	ANGLE	REMARKS
HORN ISLAND PASS ENTRANCE RANGE, REAR LIGHT	50 <sup>0</sup> 55 <b>'</b>	LEFT OBJECT
PASCAGOULA CHANNEL RANGE B, REAR LIGHT	25 <sup>°</sup> 33'30"	CENTER OBJECT
WEST OF TWO TANKS, BAYOU CASOTTE		RIGHT OBJECT
PASCAGOULA PORT AUTHORITY! GRAIN ELEVATOR	21 <sup>0</sup> 49'40"	RIGHT CHECK ANGLE
BAYOU CASOTTE, H.K. PORTER CO. TANK	33 <sup>0</sup> 31'	RIGHT CHECK ANGLE
LOCATION OF BUOY "46"		
SIGNAL	ANGLE	REMARKS
HORN ISLAND PASS ENTRANCE RANGE, REAR LIGHT	50 <sup>0</sup> 00 <b>'</b>	LEFT OBJECT
EST OF TWO TANKS, BAYOU CASOTTE	115 <sup>0</sup> 12'	CENTER OBJECT
ISLE AUX HERBES BEACON	<i>-</i>	RIGHT OBJECT
PASCAGOULA CHANNEL RANGE B, REAR LIGHT	26 <sup>0</sup> 51'	LEFT CHECK ANGLE

# U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY

#### TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): Dauphin Island

Period: April 17 - June 30, 1974

FE-309WD

HYDROGRAPHIC SHEET: H9420WD and H9448 FE-274 WD

OPR: 479

Locality: Mississippi Sound

Plane of reference (mean #ower=low water): 2.6 ft.

Height of Mean High Water above Plane of Reference is 1.2 ft.

Remarks: Recommended zoning.

Apply x1.42 range ratio to the Dauphin Island gage from Ship Island Pass to Horn Island Pass.

James R. Hulbard for Chief, Tides Branch

NOAA FORM 76-155 (11-72) NA	TIONAL C	CEANIC .	U.S. DE AND ATMO	PARTMEN' SPHERIC	T OF COM	MERCE	SURV	EY NUM	BEK	
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MISSISSIPPI SOUND										4
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# HYDROGRAPHIC SURVEY STATISTICS REGISTRY NUMBER: FE-309

	NUMBER OF CONTROL STATIONS			12
	NUMBER OF POSITIONS			1694
	NUMBER OF SOUNDINGS			0
		TIME-HOURS	DATE	COMPLETED
*	PREPROCESSING EXAMINATION	0		/ /
	VERIFICATION OF FIELD DATA	450		02/26/88
	QUALITY CONTROL CHECKS	0		
	EVALUATION AND ANALYSIS	88		02/27/89
	FINAL INSPECTION	12		02/16/89
	TOTAL TIME	550		
	MARINE CENTER APPROVAL			02/28/89

<sup>\*</sup> Preverification time is not considered as part of total survey time.

# ATLANTIC MARINE CENTER MODIFIED EVALUATION REPORT

SURVEY NO.: FE-309WD FIELD NO.: R/H-40-1-74

Mississippi, Gulf of Mexico, Horn Island Pass to Ship Island

Pass

SURVEYED: April 17 through June 26, 1974

SCALE: 1:40,000 PROJECT NO.: OPR-479

SOUNDINGS: Wire Drag CONTROL: Raydist (Range-Range),

Visual (Sextant Fixes), and Pelorus

Bearings and Radar Ranges (Range-Visual)

Chief of Party.....L. E. Pickens

#### 1. INTRODUCTION

- a. The purpose of this survey is adequately defined in the Descriptive Report and the Project Instructions. Processing of this survey has been modified so that only the hangs, groundings, and clearance depths pertaining to the hangs, groundings, and selected charted features have been verified and are addressed in this report. This modified and limited processing is considered complete in regard to nautical charting requirements.
- b. Eight plots of the verified hangs and groundings were generated and are attached to this report. These plots are considered the final plots or smooth sheets for this survey.
- c. This survey was formerly registered as survey H-9420WD; the registry number of which has subsequently been rescinded.
- d. Corrections and notes made by the evaluator to the Descriptive Report are denoted in red ink.

#### 2. CONTROL AND SHORELINE

a. Horizontal control used for data acquisition on this survey is based upon the North American Datum of 1927.

Office processing of this survey is based upon this datum. All geographic positions listed from other sources are also based upon the North American Datum of 1927. The smooth plots of the wrecks and obstructions found by this survey have been annotated with ticks showing the computed mean shift between the survey datum (NAD 1927) and NAD 1983. To place this survey on the North American Datum of 1983, move the projection lines 0.723 seconds (22.3 meters) south in Latitude and 0.070 seconds (1.9 meters) east in Longitude.

Horizontal control stations used during this survey are of Third Order, Class I accuracy or better (except stations PLATFORM,1970, GULFPORT SPIRE, PASCAGOULA CHANNEL B REAR LIGHT,1970, and WEST OF TWO TANKS, PASCAGOULA which cannot be verified). Positioning methods and calibration methods are adequately discussed in the Descriptive Report. Calibration computations were well recorded and were verifiable.

b. No shoreline was drawn on any of the smooth plots. Shoreline portrayal is not essential in modified processing.

#### 3. HYDROGRAPHY

The only echo soundings taken on this survey are reconnaissance soundings for the purpose of setting the wire drag depth and least depths on features. The reconnaissance soundings are not suitable for charting. The least depths were recorded without recording the time, method, or corrections applied and, are therefore, not suitable for charting.

#### 4. CONDITION OF SURVEY

The adequacy of the final field sheets, survey records, and reports, and conformity to the requirements of the HYDROGRAPHIC MANUAL and the WIRE DRAG MANUAL were not considered during the modified processing of this survey. Only the deficiencies of this survey to adequately investigate and position some of the hangs, to obtain sufficient lift tests for reliable effective depth determination in most strips, and to use acceptable positioning methods and control stations in some strips are noted. These deficiencies are noted since they impact charting recommendations made in section 7. of this report and degrade the accuracy and reliability of the entire survey. Eleven splits exist within the present survey. These splits are in the vicinity of:

Latitude	Longitude
30°18'00"N	88°56'00"W
30°11'15"N	88°59'30"W
30°09'55"N	88°58'15"W
30°08'30"N	88°57'00"W

30°07'05"N	88°55'50"W
30°06'55"N	88°55'15"W
30°08'45"N	88°43'20"W
30°09'30"N	88°34'30"W
30°09'30"N	88°30'50"W
30°06'45"N	88°30'00"W
30°09'07"N	88°28'57"W

#### 5. JUNCTIONS

This survey junctions to the north with FE-274WD (1974), formerly H-9448WD. An actual junction could not be effected during modified processing since the processing of FE-274WD was also modified. The smooth plotted hang on FE-274WD at 40 feet, estimated, in Latitude 30°10'00.8"N, Longitude 88°35'16.1"W is common to this survey and is in an area cleared by 41 feet in one direction only. The conflict is not considered significant since the hang depth is estimated and clearance on this survey is in one direction only. Due to modified processing, it cannot be determined whether any hangs or groundings on this survey were cleared by junctional survey FE-274WD.

#### 6. COMPARISON WITH SURVEYS

#### a. PRIOR SURVEYS

H-8647 (1961) 1:20,000 H-6552 (1940) 1:40,000 H-4171 (1920) 1:80,000 H-4021 (1917) 1:40,000 H-4000 (1917) 1:40,000

These prior surveys cover the entire present survey and are the source of all charted hydrography within the common area except the areas of maintained channels. Bottom clearances, in general, were close to the bottom (1 to 4 feet) throughout the surveyed area. Present survey effective clearance depths range from 15 feet shoaler to 3 feet deeper than prior hydrography.

No conflicts exist between present survey effective depths and prior surveys H-8647 (1961) and H-4021 (1917) except the present survey hangs within the common area which are smooth plotted and are addressed in section 7.a. of this report. A wreck located by H-8647 in Latitude 30°15'26.2"N, Longitude 88°20'10.2"W is common to the present survey. This wreck is charted and is addressed in section 7.a.9) of this report.

Within the common area, two soundings on prior survey H-6552 (1940) and four soundings on prior survey H-4171 (1920) are 1-foot shoaler than present survey effective depths. These six conflicting soundings are not

considered significant in consideration of the 34 to 54 years between the present and prior surveys and the differences of surveying methods. Six hangs and three conflicting groundings on the present survey are within the common area of prior survey H-4171 (1920). These hangs and groundings have been smooth plotted and are addressed in section 7.a. of this report. The three conflicting groundings are in an area (in the vicinity of Latitude 30°08'N, Longitude 88°42'W) noted by the hydrographer as being up to 5 feet shoaler than prior hydrography.

Numerous soundings on prior survey H-4000 (1917) are shoaler than present survey effective depths by up to three feet. The numerous conflicts indicate a general deepening trend within the common area west of Longitude 88°54'W. Within the common area east of Longitude 88°54'W and south of Latitude 30°07'N, some general shoaling is indicated as evidenced by TOB tests and a grounding shoaler than the prior hydrography. Three hangs and one conflicting grounding have been smooth plotted and are addressed in section 7.a. of this report.

The shoaling trends in some areas and the deepening trends in other areas common to the present survey indicate a need for additional hydrography to be conducted in these areas.

It is not the intent of the present survey to supersede but only to supplement prior hydrography.

#### b. SUBSEQUENT SURVEYS

H-10206 (1985) 1:40,000 H-10208 (1985) 1:20,000 H-10261 (1987) 1:20,000

Subsequent survey H-10206 (1985) is common to a small area in the southeast portion of the present survey. No conflicts exist between present and subsequent data. Subsequent hydrography ranges from 0 to 7 feet deeper than present survey effective depths. No present survey hangs or groundings are common to this subsequent survey.

Subsequent survey H-10208 (1985) is common to approximately one-eighth of the present survey at the eastern edge of the present survey. Numerous subsequent soundings conflict with present effective depths by up to 3 feet. These conflicts may be due to the different methods of surveying, insufficient lift testing, and/or a shoaling trend which is noted in the Evaluation Report for H-10208 (1985). One present survey hang is common to this subsequent survey. This hang is smooth plotted and is addressed in section 7.a. of this report.

The comparison with survey H-10261 (1987) is discussed in the Evaluation Report of that survey.

7. COMPARISON WITH CHARTS 11373 (30th Ed., Sept 6, 1986)
1267 (19th Ed., Oct. 27, 1973)

#### a. HYDROGRAPHY

The charted hydrography originates with the previously discussed prior surveys and from miscellaneous sources not readily available. The charted soundings from miscellaneous sources are in the areas of the maintained channels. Some charted soundings from miscellaneous sources do conflict with present survey effective depths but are not considered significant since the channels are maintained, the dredged material is dumped in spoil areas along side the channels, and currents are continually altering the shoals near these gulf islands passes. The previously discussed prior surveys require no further consideration. Attention is directed to the following:

- 1) Presurvey Review Item #53, a <u>dangerous sunken</u> wreck (2-3/4-fm. rep. 1959) charted in Latitude 30°05.6'N, Longitude 88°56.7'W originates with N. to M. No. 13 of 1959 and is reported as a sunken barge with 16 feet of water over it. This item was not located by the present survey but was cleared in two directions by a minimum effective depth of 29 feet for a minimum of a 1-mile diameter circle around the charted position. This item is considered disproved and is recommended to be removed from all effected charts.
- ×2) Presurvey Review Item Item #54 (also the fourth listed Fish Haven Obstruction of Item #20B), a dangerous 11373 sunken wreck PA, charted in Latitude 30°10'N, Longitude 88°54'W originates with N. to M. No. 4 of 1962 and is reported to be the 55-foot F/V RUSTY sunk in about 25 feet of water. This wreck is charted as a Fish Haven Obstruction (see also Chart Letters 1453 of 1969 and 674 of 1973). This ✓ item was not located by the present survey but was cleared in one direction only by a minimum effective depth of 26 feet for a minimum of a 1-mile radius circle around the charted position. Clearance throughout the area of this item has been sufficient for disproval. This wreck could be disproved but it has been designated as a Fish Haven Obstruction. Therefore, it is recommended that this item be retained as presently charted with a label in parentheses: (cleared to 26 feet 1974) and the label "PA" revised to "PD". Consideration should be given to a 200% side scan sonar search of the area to verify or disprove its existence.
- ?3) Presurvey Review Item #55, a <u>Fish Haven</u>
  <u>Obstruction PA</u>, charted in Latitude 30°10.5'N, Longitude
  88°50.6'W originates with N. to M. No. 46 of 1959 and

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consists of a wrecked barge loaded with auto tires wired to the frame. This item was not located by the present survey but the charted position of this item was cleared by an effective depth of 34 feet. It is recommended that this Fish Haven Obstruction be retained as presently charted with a label in parentheses: (cleared to 34 feet 1974). Additional survey work would be required to verify or disprove this item.

- Ya) Presurvey Review Item #56 (also the third listed Fish Haven Obstruction of Item #20B), a dangerous sunken wreck PA, charted in Latitude 30°09.25'N, Longitude 88°47.5'W originates with N. to M. No. 32 of 1960 and is reported to be the F/V EVA LOUISE. This wreck is charted as a <u>Fish Haven Obstruction</u> (see also Chart Letters 75 of 1976, 674 of 1973, and 1453 of 1969). This item was not located by the present survey but was cleared in two directions by a minimum effective depth of 38 feet for a minimum of a 1-mile radius circle around the charted position. Clearance throughout the area for this item has been sufficient for This wreck should be considered disproved but it disproval. has been subsequently designated as a Fish Haven Obstruction. Therefore it is recommended that this item be retained as presently charted with a label in parentheses: (cleared to 38 feet 1974). Consideration should be given to a 200% side scan sonar search to verify or disprove its existence. SHT 6 OF 8
- (5) Presurvey Review Item #57 (also the second NAD 83 listed Fish Haven Obstruction of Item #20B), a dangerous 30009121.2" 880 29 10.2 sunken wreck charted in Latitude 30°09.7'N, Longitude 88°29.3'W is No. 685, U. S. Navy Wreck List, and is the schooner LEWIS BROTHER sunk in 1925. It was reported to be in Latitude 30°09'30"N, Longitude 88°29'15"W. This item is charted as a Fish Haven Obstruction. This item was hung by 11373 the present survey at 41 feet, estimated, in Latitude  $430^{\circ}09'20.4''$ , Longitude 88°29'10.0''W. This hang was cleared in two directions by 39 feet. This hang was not investigated. This hang lies in prior (H-4171) depths of 42 to 46 feet. It is recommended that this hang be charted in the position determined by the present survey as a Fish Haven Obstruction with a label in parentheses: (cleared to 39 feet 1974). Additional field work is not recommended on this item.
  - first listed Fish Haven Obstruction of Item #20B), an uncharted proposed (see Chart Letters 1453 of 1969 and 674 of 1973) Fish Haven Obstruction in Latitude 30°04.9 N, Longitude 88°36.9 W was not found by the present survey. This item was cleared by the present survey in one direction only by a minimum effective depth of 51 feet for a minimum of a 1-mile diameter circle. This proposed Fish Haven Obstruction was charted in 1974 (chart 11373, 20th Ed.). No

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charting recommendation is made at this time since this proposed Fish Haven Obstruction may have not been established and is not presently charted. It may be desirable to conduct a side scan sonar search of the area to verify its existence and position.

- $\times$  7) Presurvey Review Item #21B, a dangerous sunken  $\sqrt{\text{wreck}}$ , charted in Latitude 30°12.5'N, Longitude 88°59.1'W originated with N. to M. No. 31 of 1961 and is reported to be the F/V RADIO. This item was not investigated by the present survey. This item should remain as presently charted.
- 8) A charted <u>dangerous submerged obstruction</u> (rep. 1973) in Latitude 29°59'21"N, Longitude 88°23'43"W was investigated but not located by the present survey. This charted obstruction (probably originated with Chart Letter 1394 of 1973) was not an assigned item. The present survey cleared this charted obstruction by an effective depth of 92 feet in one direction only. The area cleared was slightly less than a 1-mile diameter circle around the obstruction. Insufficient area was cleared for disproval of this item, however the results of the present survey are sufficient to change the charting status to position doubtful. It is recommended that this <u>dangerous submerged obstruction</u> be retained as charted but with the "PD" notation.
- 9) A charted dangerous sunken wreck in Latitude 30°15'26.2"N, Longitude 88°20'10.2"W was investigated by the present survey. This wreck originated with prior survey H-8647 (1961) and is identified as a sunken barge, 225 feet long by 40 feet wide with a least depth of 12 feet. Present survey strip KA-2 covered the charted position of this wreck by an effective depth of 14 feet, but the position control of the strip was unacceptable. Positioning on this strip was accomplished by radar ranges and gyro bearings to Dauphin Island Lighted Buoy "46". It is recommended that this charted dangerous sunken wreck with a least depth of 12 feet be retained as presently charted. Additional field work is recommended to verify or disprove this charted wreck.
- submerged obstruction cleared by 40 feet in Latitude 30°10'00.8"N, Longitude 88°35'16.1"W was not located by the present survey. This charted obstruction originates from junctional survey FE-274WD (1974). This obstruction was cleared in one direction only by 41 feet by the present survey. Adequate charting recommendations for this obstruction are made in the Evaluation Report of FE-274WD (1974).
- 11) A present survey hang occurred at 5 feet in VAD & Latitude 30°17'45.0", Longitude 88°55'58.8"W. This hang was 30°17'45.9" 8°57'59.0

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cleared in one direction only by two feet. This hang was investigated and is identified as a sunken dredge approximately 80 feet in length and extending 6 to 7 feet off the bottom. A leadline depth of  $6\frac{1}{2}$  feet (corrected for smooth tides) was taken on this wreck. This least depth is not considered valid since the shoalest hang depth was 5 This wreck lies in prior (H-4021) depths of 14 feet. This wreck was charted as a wreck cleared by 5 feet in 1974 (chart 11373, 20th Ed.) from advance information from the present survey FE-309WD, but has since been deleted from the chart. It is recommended that this hang be charted in the position determined by the present survey as a dangerous sunken wreck with a label in parentheses: (cleared to 2 feet Additional field work is not recommended on this 1974). wreck.

-5μείτ 2 ο ξ θ -12) A present survey hang occurred at 15 feet, 9 estimated, in Latitude 30°11'34.6"N, Longitude 88°59'23.7"W, position approximate (±800 feet). This hang was cleared in one direction only by 14 feet. This hang was investigated and is identified as a pipe, 8 inches in diameter, extending 5 feet off the bottom. The hydrographer believes that this pipe possibly was once a leg of a platform and that more pipes or legs may exist in the proximity of this hang. pipe lies in prior (H-4000) depths of 25 feet. obstruction is presently charted on chart 11373 (30th Ed.) from advance information from the present survey FE-309WD. It is recommended that this presently charted obstruction be revised to a dangerous submerged obstruction, PA, with a label in parentheses: (cleared to 14 feet 1974) in the position determined by the present survey. Additional field work on this obstruction is not recommended, but additional field work is recommended to verify or disprove the possible existence of other pipes or platform legs within the area.

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/13) A present survey hang occurred at 31 feet, estimated, in the vicinity of Latitude 30°07'45"N, Longitude 88°55'30"W. This uninvestigated hang was not positioned by the hydrographer and the position given is estimated at ±1500 meters. This hang was cleared in two directions by 29 × NCC feet. This hang lies in prior (H-4000) depths 30 to 31 feet. This hang is in the vicinity of the charted disposal area for dredged material. Since this hang is within 2 feet of the bottom and is in the vicinity of a spoil area, it is not recommended to be charted. This hang is not smooth plotted.

14) A present survey hang occurred at 29 feet in Latitude 30°07'14.3"N, Longitude 88°56'40.5"W. This hang was cleared in one direction only by 21 feet. This hang was investigated and is identified as a piece of iron , 20 feet long, extending 4 feet off the bottom. A least depth of 26 feet was claimed but the time, method, and correctors applied were not noted, therefore the least depth was

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disregarded. This obstruction lies in prior (H-4000) depths of 29 feet. This obstruction is presently charted on chart 11373 (30th Ed.) as a dangerous submerged obstruction (26 ft rep) from advance information (Chart Letter 516 of 1974) from the present survey FE-309WD (1974). It is recommended that this hang be charted in the position determined by the present survey as a dangerous submerged obstruction with a label in parentheses: (cleared to 21 feet 1974). Additional field work is recommended on this obstruction to obtain a least depth.

15) A present survey grounding occurred at 43 feet 30°05'00.4° in Latitude 30°05'00.6"N, Longitude 88°52'38.3"W. This grounding was not cleared. This grounding lies in prior (H-4000) depths of 47 feet. It is recommended that this grounding be charted in the position determined by the present survey as a 43-foot depth. This grounding indicates shoaling in the area and additional field work is recommended to verify or disprove the shoaling. This grounding is smooth plotted.

16) A present survey grounding occurred at 45 feet in Latitude  $30^{\circ}08'51.8"N$ , Longitude  $88^{\circ}43'21.8"W$ . This grounding was not cleared. This grounding lies in prior (H-4171) depths of 48 to 50 feet. It is recommended that this grounding be charted in the position determined by the present survey as a 45-foot depth. This grounding indicates shoaling in the area and the hydrographer noted shoaling in this area. Additional field work is recommended to verify or disprove the shoaling. This grounding is smooth plotted.

17) A present survey hang occurred at 48 feet, estimated, in Latitude 30°07'41.6"N, Longitude 88°43'23.9W, position approximate (±800 feet). This hang was cleared in one direction only by 43 feet. This hang is noted in the Descriptive Report as being a piece of metal junk extending 3 to 4 feet off the bottom. This hang lies in prior (H-4171) depths of 52 feet. It is recommended that this hang be charted in the approximate position determined by the present survey as a dangerous submerged obstruction with a label in parentheses: (cleared to 43 feet 1974). Additional field work is recommended to identify, accurately position, and obtain a least depth on this obstruction.

18) A present survey grounding occurred at 47 feet in Latitude 30°08'26.1"N, Longitude 88°42'04.00"W. This grounding was not cleared. This grounding lies in prior (H-4171) depths of 52 to 53 feet. It is recommended that this grounding be charted in the position determined by the present survey as a 47-foot depth. This grounding indicates shoaling in the area and the hydrographer noted shoaling in this area. Additional field work is recommended to verify or disprove the shoaling. This grounding is smooth plotted.

NAD 83 30°07'42.4" 88°43'24.1"

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A present survey grounding occurred at 51 feet in approximately Latitude 30°07'40"N, Longitude 88°39'50"W. This grounding was cleared by 48 feet. This grounding lies in prior (H-4171) depths of 55 to 56 feet. It is recommended that this grounding be charted in the approximate position determined by the present survey as a 51-foot depth. This grounding indicates shoaling in the area and the hydrographer noted shoaling in this area. Additional field work is recommended to verify or disprove the shoaling.

A present survey hang occurred at 43 feet in 20) Latitude 30°08'36.5"N, Longitude 88°34'23.0"W, position approximate (±800 feet). This hang did not stop the drag but moved with the ground wire. This hang was cleared in one direction only by 44 feet which appears to be a conflict but is not considered as such since the object hung was not significant enough to stop the drag. The object hung is suspected to be some minor debris. Divers attempted to locate and identify this hang but were unable to find anything. This hang lies in prior (H-4171) depths of 44 to 46 feet. This hang is not considered to be a hazard to navigation and is not recommended to be charted. additional field work is recommended. This hang is not smooth plotted.

21) A present survey hang occurred at 44 feet, estimated, in Latitude 30°09'16.3"N, Longitude 88°34'01.2"W. This hang was not cleared and was not investigated. This hang lies in prior (H-4171) depths of 46 to 48 feet. It is recommended that this hang be charted in the position determined by the present survey as a dangerous submerged obstruction. Additional field work is recommended to identify and obtain a least depth on this obstruction.

/3009117.1" 88°34 01.4"

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- 5484 5 of 8 22) A present survey hang occurred at 42 feet, estimated, in Latitude 30°08'53.3"N, Longitude 88°33'48.7"W, position approximate (±1500 feet). This hang was cleared in one direction only by 40 feet. This hang was investigated and is identified as a hunk of steel, 5 feet wide and extending 5 feet off the bottom. It was noted in the daily journal that this hang has a least depth of 40 feet, but since the time, method, and correctors applied were not noted, it was disregarded. This hang lies in prior (H-4171) depths of 44 to 45 feet. It is recommended that this hang be charted in the approximate position determined by the present survey as a dangerous submerged obstruction, PA, with a label in parentheses: (cleared to 40 feet 1974). Additional field work is recommended to accurately position / and determine the least depth of this obstruction.

NAD 83 88°33'48,9" 11373

23) SAt 60 F 9
23) A present survey hang occurred at 31 feet in Latitude 30°09'13.9"N, Longitude 88°28'29.7"W. This hang was cleared in one direction only by 30 feet. This hang was 80°28'29.29.4"

NAO 83 30009'14.7" investigated and is identified as a sunken barge, 100 feet in length. This hang lies in prior (H-4171) depths of 42 to 46 feet and in subsequent (H-10208) depths of 43 to 44 feet. It was noted in the daily journal that this wreck has a least depth of 34 feet, but since the time, method, and correctors applied were not noted and it conflicts with the shoalest hang depth, it was disregarded. This wreck is presently charted on chart 11373 (30th Ed.) from advance information from the present survey, FE-309WD. recommended that this hang be charted in the position determined by the present survey as a dangerous sunken wreck with a label in parentheses: (cleared to 30 feet 1974). Additional field work is not recommended on this wreck unless it is necessary to obtain a least depth.

24) 3HT 70F8 NAD 3-3 'A present survey hang occurred at 17 feet in 30°14'56.7" Latitude 30°14'55.6"N, Longitude 88°26'09.4"W. This hang 830 26 09.6" was not cleared. This hang was investigated but the results are unclear. The daily journal in the volume states that the item (a charted <u>dangerous sunken wreck</u>) was found, but in the Descriptive Report (section H.6.), it is stated as being a mud knoll. Both prior surveys H-8647 (1961) and H-4020 (1917) are common to this hang and show a flat bottom 17 to 18 feet in depth which did not change over the 44 years between these prior surveys. It is believed that this hang actually was the item being sought. It is recommended that this hang be charted in the position determined by the present survey as a dangerous sunken wreck. Additional field work is recommended to identify and obtain a least depth on this item.

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25) 80F9 A present survey hang occurred at 14 feet, NAD 13 estimated, in Latitude 30°15'31.2"N, Longitude 88°20'32.0"W, 30915'37.0" position approximate, in prior (H-8647) depths of 17 feet 88020132,2" and was not cleared. This hang was investigated and is identified as debris (metal wires) extending 2½ feet off the The position of this hang is approximate since the  $V_{ij}$ 374 position control of the strip was radar ranges and gyro bearings to Dauphin Island Lighted Buoy "46". It is recommended that this hang be charted in the approximate position determined by the present survey as a dangerous submerged obstruction. Additional field work is recommended to obtain an accurate position and least depth on this obstruction.

26) The following present survey groundings do not conflict with prior hydrography, are not smooth plotted, and are not recommended to be charted:

Grounding Depth	Prior Depths	Latitude	Longitude
12½ feet	14 feet	30°17'27.5"N	8 <mark>8°55'49.1</mark> "W
45 feet	45-46 feet	30°08'35"N	88°37'20"W
47 feet	47 feet	30°07'38.8"N	88°29'20.2"W
42 feet	41-42 feet	30°10'11.8"N	88°29'11.4"W

Numerous features (wrecks, obstructions, wells, and oil platforms) are charted on the 1986 edition of chart 11373 which were not charted in 1974. Since these charted features did not exist in 1974, they are not considered nor addressed by the present survey.

### b. Aids To Navigation

Six fixed aids to navigation were used as a visual control stations and are listed in Attachment I of the Descriptive Report. Twenty-two floating aids to navigation were located by this survey as noted in Attachment V of the Descriptive Report. None of these floating aids to navigation were verified. Many of the floating located in 1974 no longer exist in 1988. It is recommended that these aids to navigation (floating and fixed) be charted in accordance with the most current available information.

### Maintained Channels

Horn Island Pass Channel and Ship Island Pass Channel are maintained channels common to the present survey. Within the common areas, no conflicts exist between the charted channel tabulations (1974 and 1986) and the present survey effective depths.

### 8. COMPLIANCE WITH INSTRUCTIONS

Compliance of this survey with the Project Instructions was not considered during this modified processing.

### 9. ADDITIONAL FIELD WORK

In general the adequacy of this survey was not considered during modified processing, except as it serves charting needs.

Maurice B. Hickson, III

Cartographer

Modified and Limited Verification

of Field Data

Modified and Limited Evaluation and Analysis

### 1

## INSPECTION REPORT FE-309WD

The completed survey has been inspected with regard to survey coverage, investigation of hangs and clearance depths, cartographic symbolization, and verification or disproval of charted data. The survey complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected

R. D. Sanocki

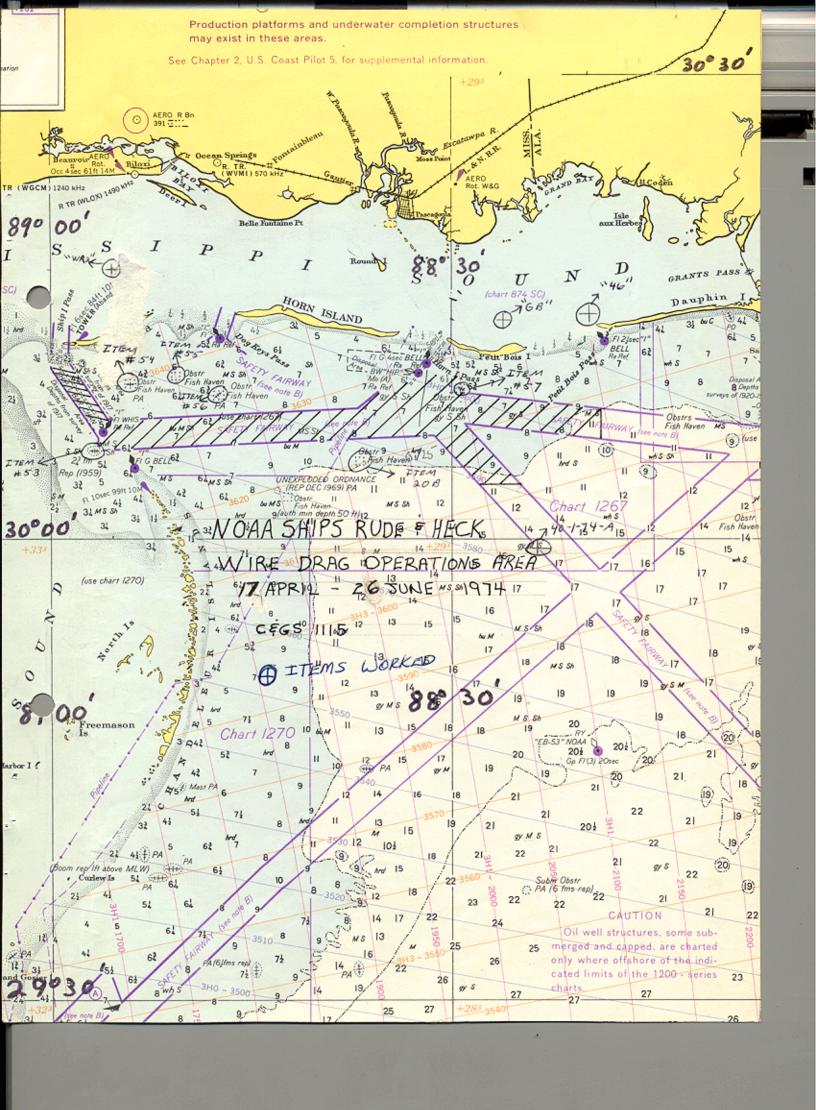
Chief, Hydrographic Surveys Processing Section Hydrographic Surveys Branch

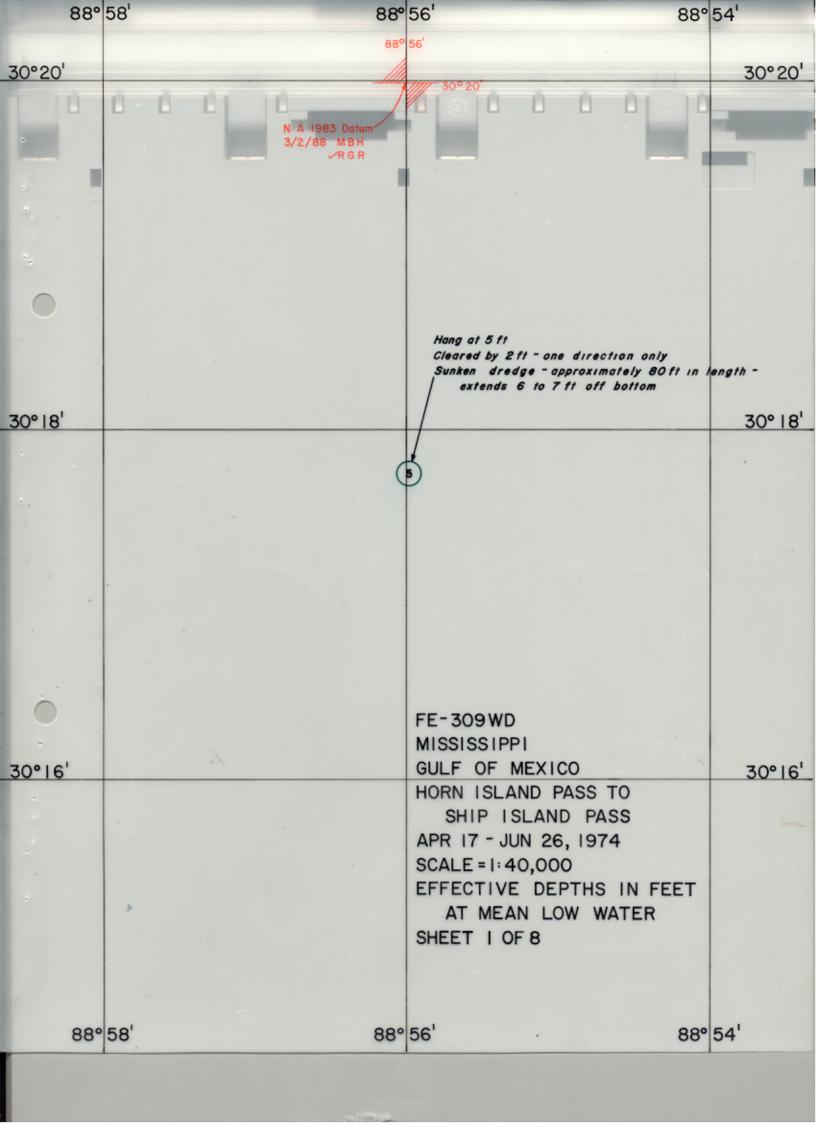
William A. Wert, LCDR, NOAA Chief, Hydrographic Surveys Branch

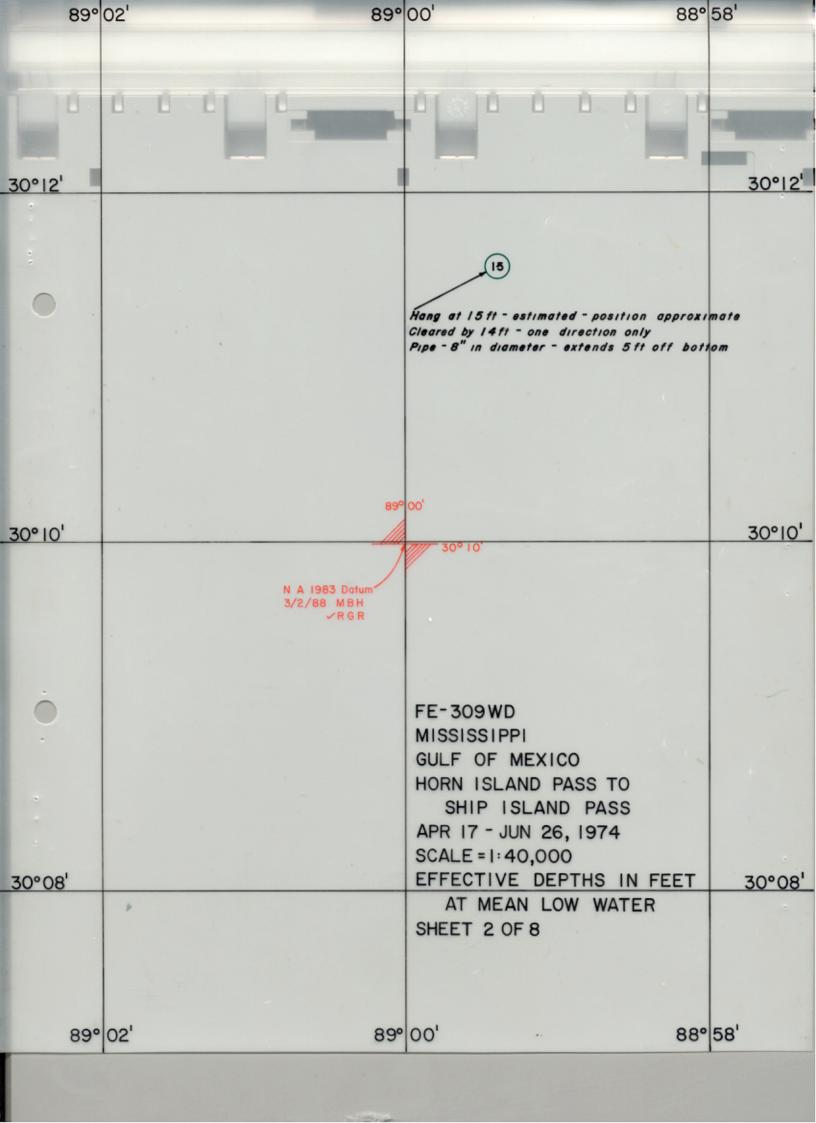
Approved February 28, 1989

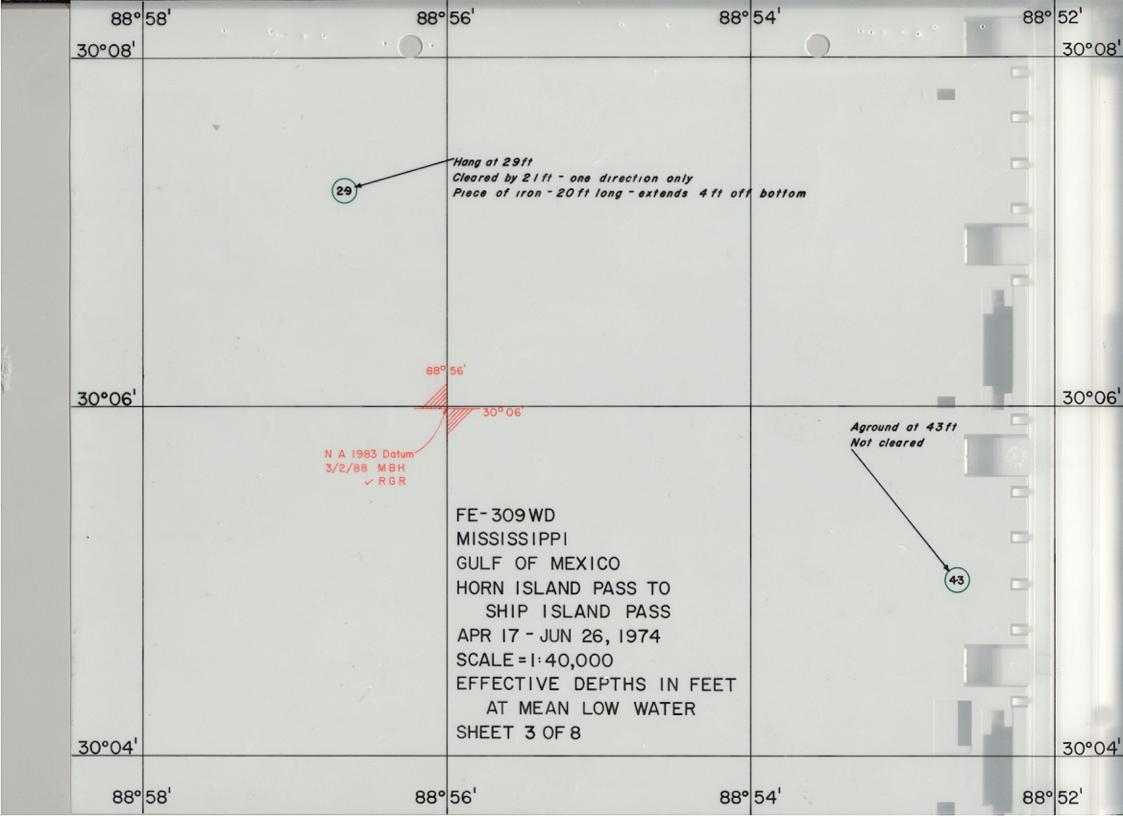
Ray E. Moses, RADM, NOAA

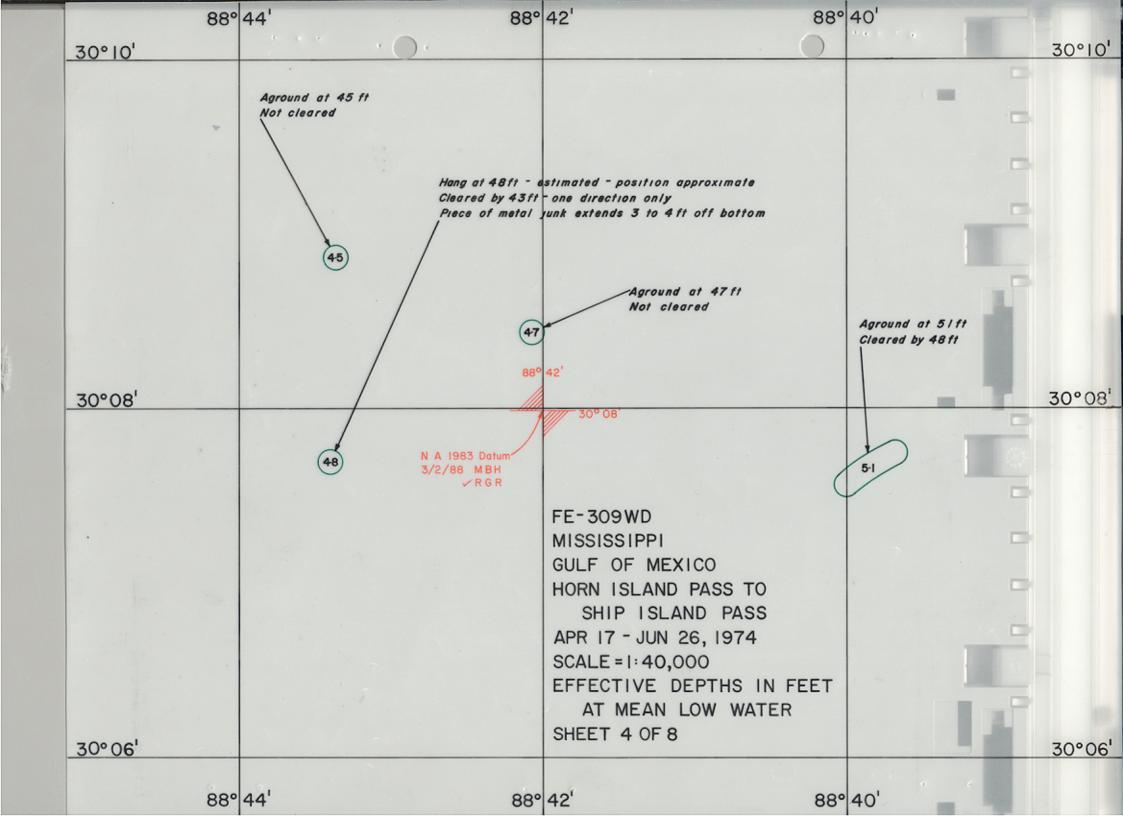
Director, Atlantic Marine Center

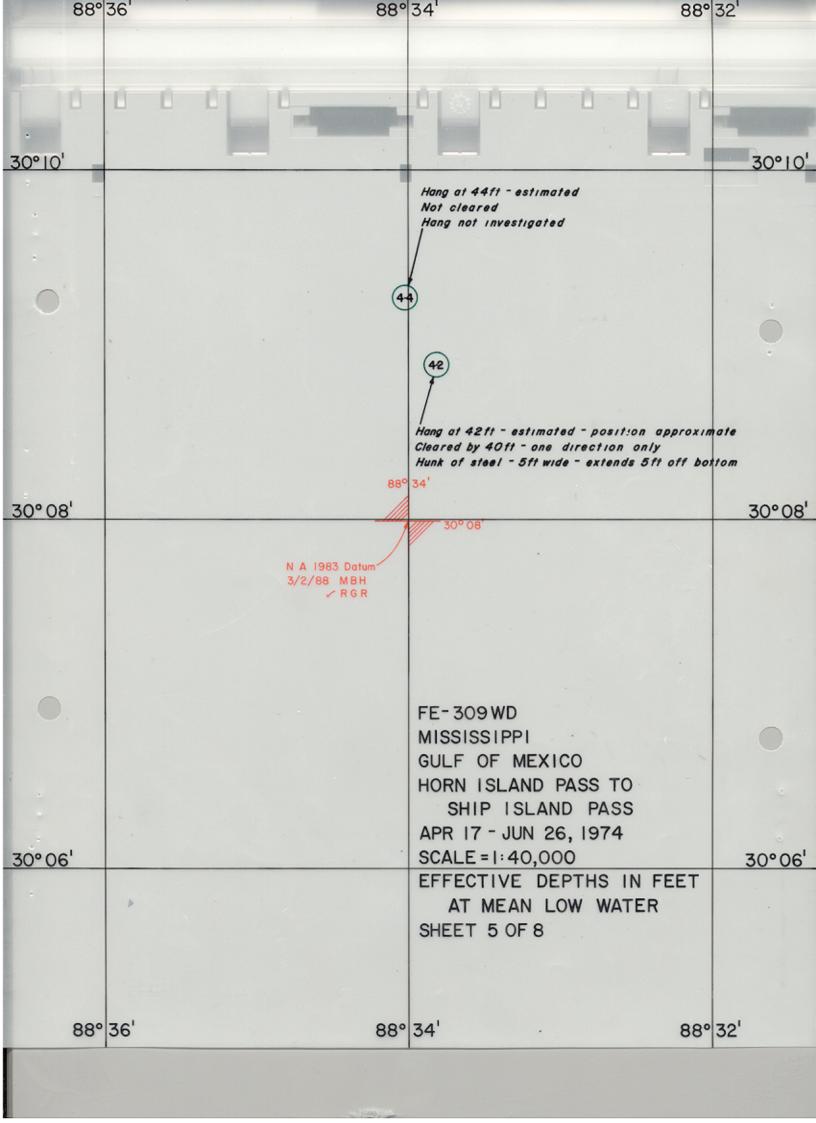


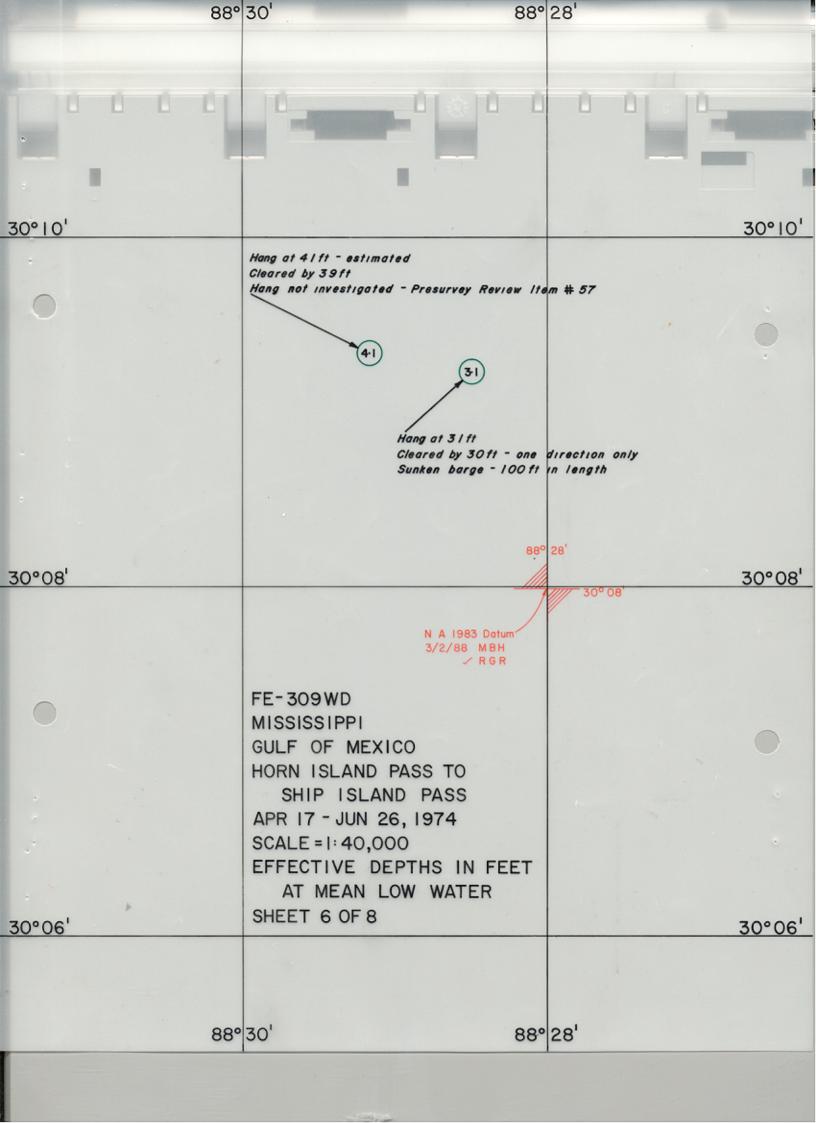


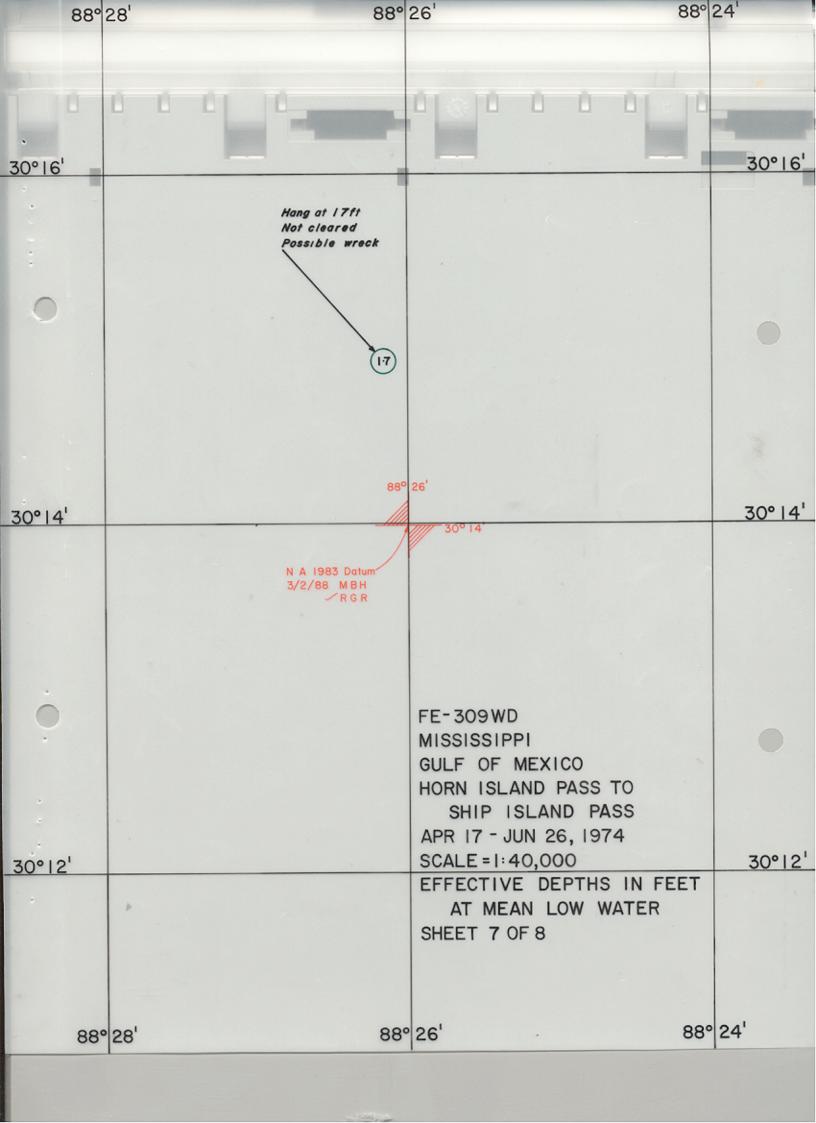


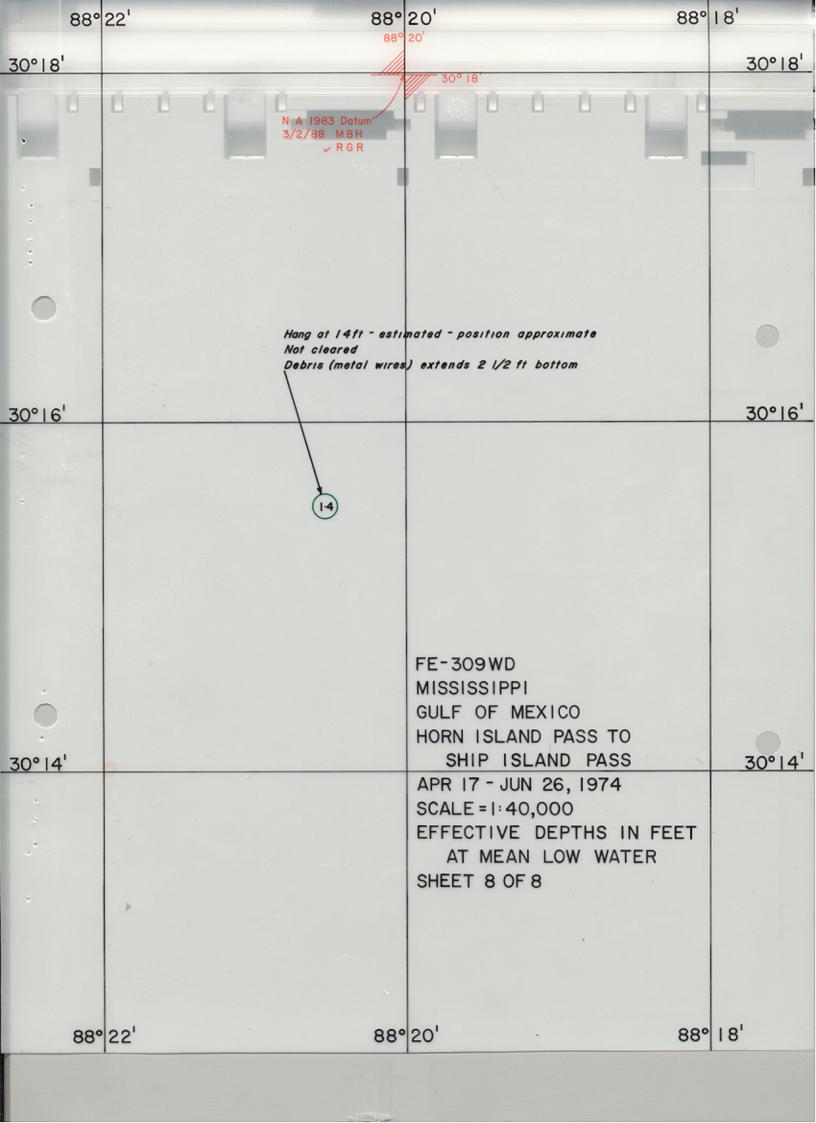












30"40" Howison MISSISSIPPI INDEX HYDROGRAPHIC SURVEYS Complete through August 1978 1966-1972 MOBILE BAY - PEARL RIVER CyBelle Fontaine ALABAMA-MISSISSIPPI Grand Bay MOBILE BAY Pass Christian H-8924 H-8971 H-9004 H-9177 SS Rockville, H-9200 H-9347 Diagram HYDROGRAPHIC SURVEYS LAKE H-8922 H-8923 1966-68 10,000 BORGI 1966-67 10,000 H-8924 1967-68 20,000 H-8925 H-8970 H-8971 H-9004 1967-68 1968 10,000 FE-309WD 10,000 1968 1968-69 1970-71 1970 1970-71 1970-71 1971-72 CHANDELEUR 20,000 H-9028 H-9118 20,000 H+9861 1267 20,000 10,000 10,000 10,000 20,000 20,000 H-9156 H-9177 SOUND H-9199 H-9200 CHANDELEUR H-9261 1971 H-9262 10,000 H-9279 H-9347 1972 10,000 ISLANDS FREEMASON IS 1972-73 20,000 On Scales of 1:10000 6.34 inches=1 statute mile 1:20000 3.17 inches=1 statute mile OLD HARBOR IS MEXICO G L F of speed is BRETON SOUND ERROL I 89\*30 88\*30" 88\*00"

# DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration National Ocean Survey

# MARINE CHART BRANCH RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. \_FE-309WD

		EXAMINED FOR MY			
A basic hydrogr	aphic or topogra	phic survey supersedes all info	rmation of like nature on the uncorrected chart.	CORU A	
1. Letter all info	ormation.			9-77-89	
2. In "Remarks 3. Give reasons	for deviations,	out words that do not apply. if any, from recommendations	made under "Comparison with Charts" in the Review.	7-22-01	
CHART	DATE	CARTOGRAPHER	· REMARKS	₩14.90	
11372A	9-22-89	F. Et lest burne	Ful Defore After Marine Center Approval Signed V	ia	
			Drawing No. 22		
11373	9-22-39	PELLIN	Full Part Before After Marine Center Approval Signed Via		
	V		Drawing No. 55		
1+3740	9-22-89	E.E. Host	Ful Part Before After Marine Center Approval Signed V	ia	
		15750000	Drawing No. 23		
1127/14	12-13-89	Ed Martin	Full Part Before After Marine Center Approval Signed V	ia	
11.2 14 A SE	12-13-05		Drawing No. 23A		
1					
11323	6/12/90	DAN BLACK	Full Part Before After Marine Center Approval Signed V	'ia	
	G/14 19	VAN BOASE	Drawing No. 55		
11360	1-77-915	ELLEN SPENCER	Full Part Before After Marine Center Approval Signed V	ia ·	
11360	021-10	ELCEN SPERCE	Drawing No. 45		
411'	9/21/90	Dan Black	Full Part Before After Marine Center Approval Signed V	'ia	
771	11011-10	200	Drawing No 6 2 Exam, No lon		
11006	1/14/91	Armacen	Full Part Before After Marine Center Approval Signed V	ia Added 'PD" on obstr	
11000	1/17/21	,.	Drawing No. note as recommended @ 29°06'30"N. 88° 01'30"W.		
			Full Part Before After Marine Center Approval Signed Via		
			Drawing No.		
			Full Part Before After Marine Center Approval Signed V	'ia	
			Drawing No.		